

benesch

alfred benesch & company
Engineers • Surveyors • Planners
222 North Washington Square, Suite 200
Lansing, Michigan 48933
PH 517-482-1662 Fax 517-482-7180



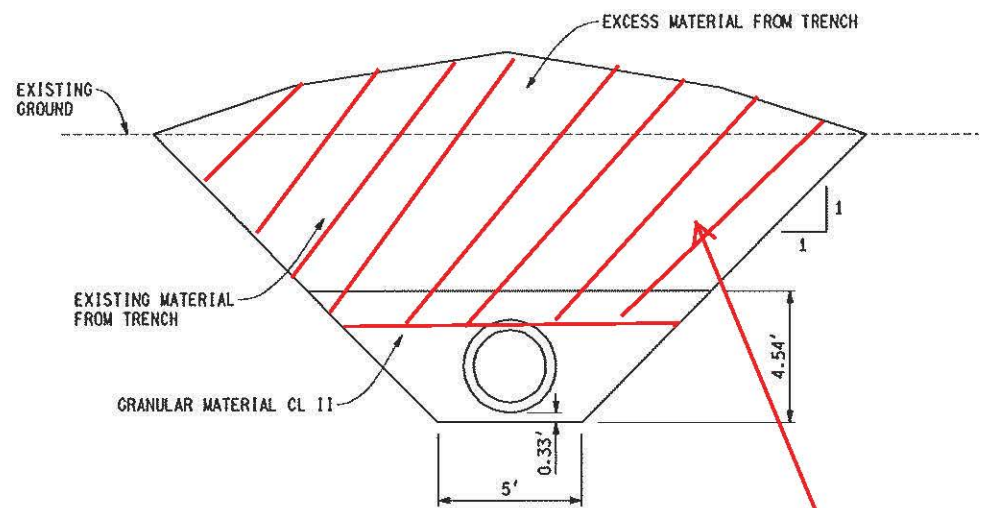
DRAINAGE OUTLET DETAIL

Figure 1

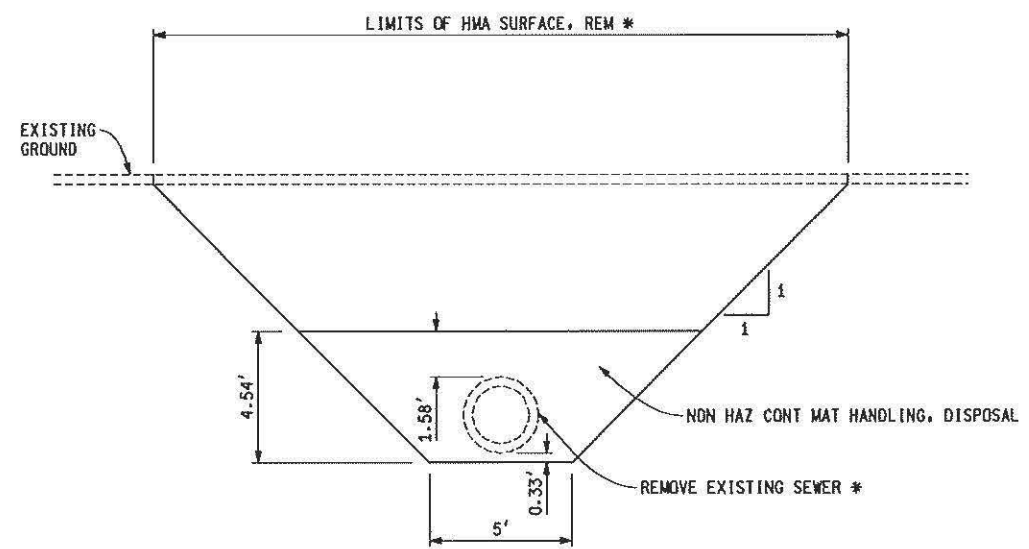
DATE	CONT. SEC.	JOB NO.	DESIGN UNIT	SHEET NO.
01/06/12	03023	90028A	SYTSM	114

FILE NAME: 90028_dr_outlet-1.dgn
WORKED ON BY:
DATE:
CHECKED BY:

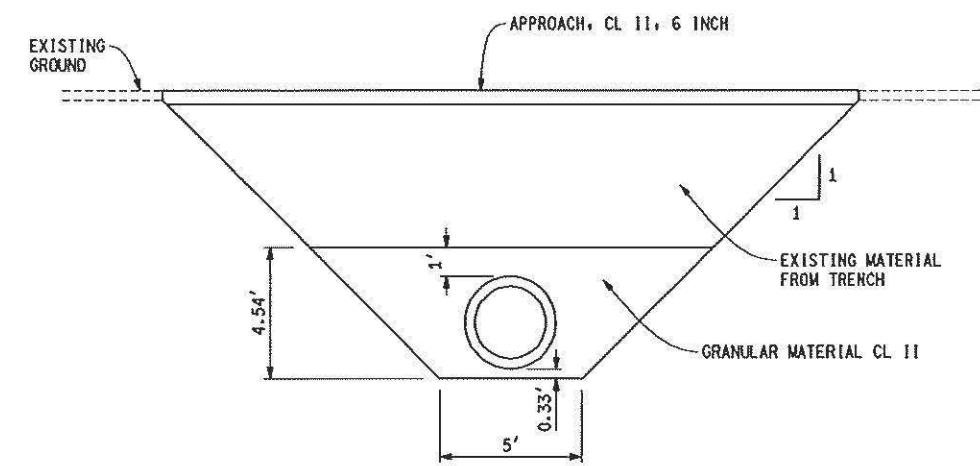
FINAL R.O.W.			
AUTH	DATE	NO.	REVISION



PRINCE OUTLET TRENCH DETAIL
To apply to Section 1



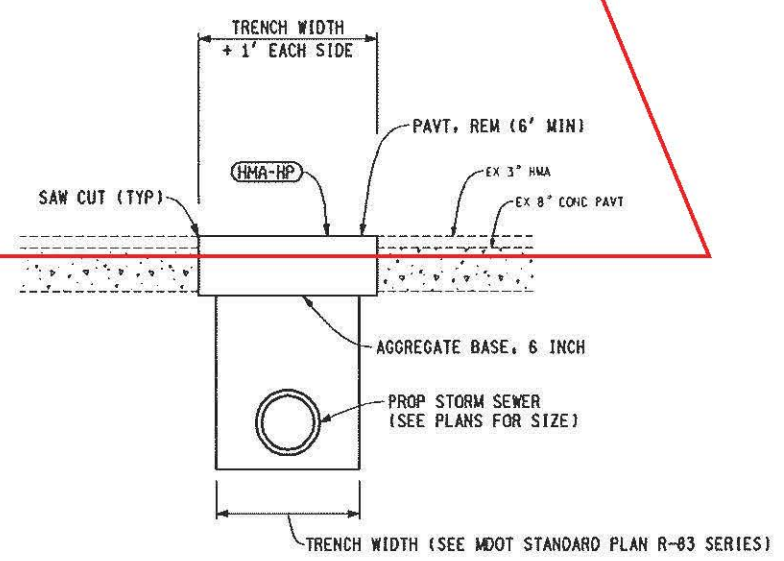
CHURCH OUTLET REMOVAL TRENCH DETAIL



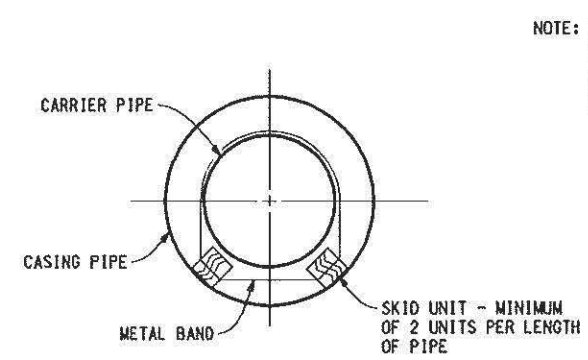
CHURCH OUTLET TRENCH DETAIL

* - EXISTING SEWER PIPE AND EXISTING HMA SURFACE WILL BE DISPOSED OF IN ACCORDANCE WITH SPECIAL PROVISION FOR NON-HAZARDOUS CONTAMINATED MATERIAL HANDLING AND DISPOSAL

Remove all material in previously excavated trench to top of pipe. Backfill with clean material to 6" below existing ground (prior to berm). Replace riprap per plan. Place 6" of clean topsoil obtained from offsite and seed/mulch in accordance with DEQ Permit No. 11-03-0046-P, condition 25.



DETAIL OF TEMPORARY PAVEMENT PATCH FOR ADVANCE STORM SEWER PLACEMENT



SKID UNIT DETAIL FOR CASING PIPE

NO SCALE

benesch

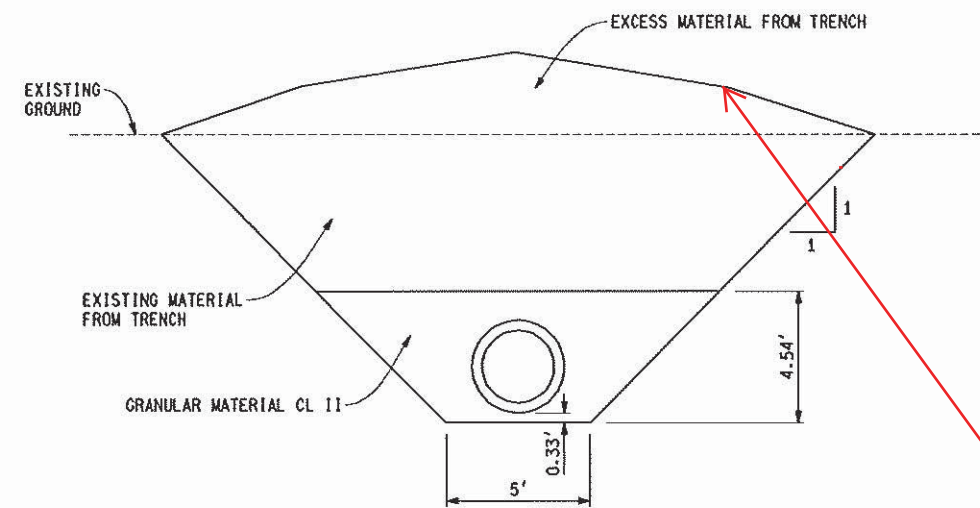
alfred benesch & company
Engineers - Surveyors - Planners
222 North Washington Square, Suite 200
Lansing, Michigan 48933
PH 313-467-1682 Fax 313-482-7180



MISCELLANEOUS DETAIL					Figure 2
DATE	CONT. SEC.	JOB NO.	DESIGN UNIT	SHEET NO.	
01/06/12	03023/03024	90028A	SYTSMA	R.O.W CONST.	38

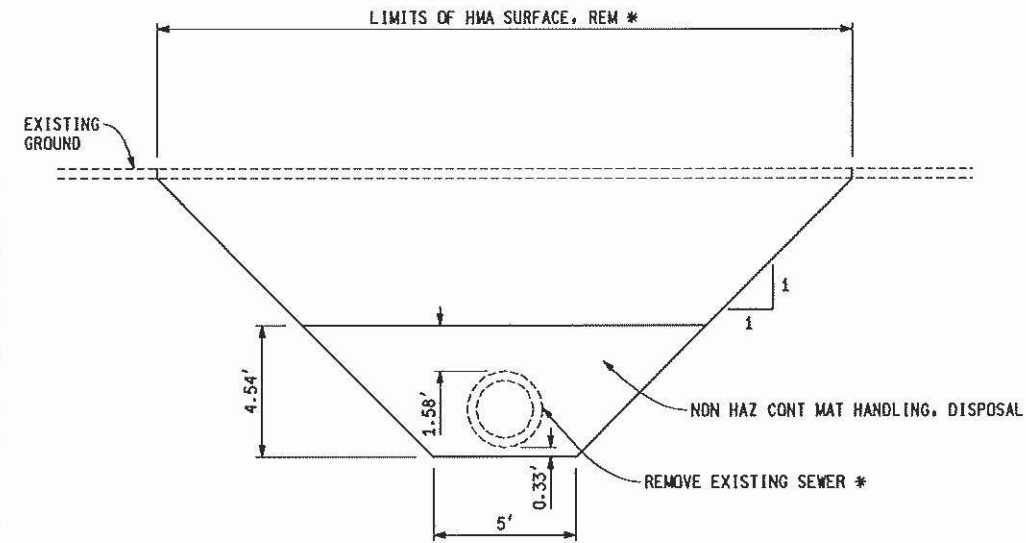
FILE NAME: 90028.miscdet-05.dgn
WORKED ON BY:
DATE:
CHECKED BY:

FINAL R.O.W.			
AUTH	DATE	NO.	REVISION



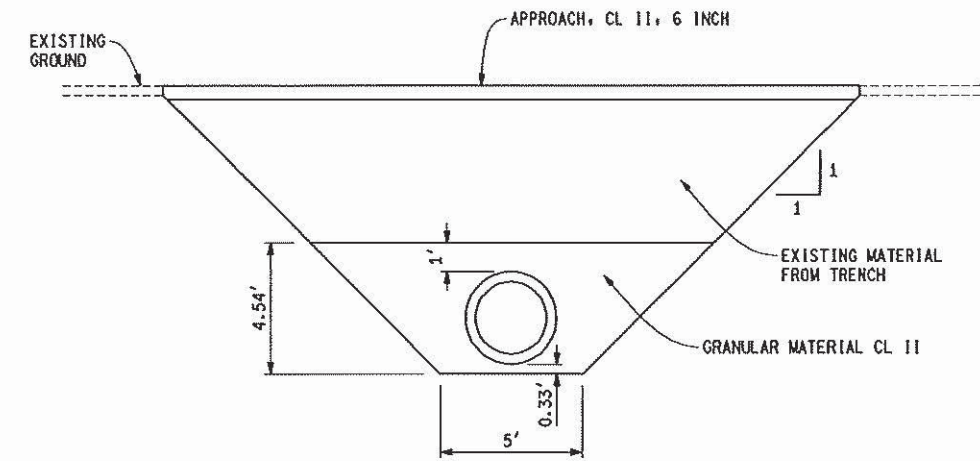
PRINCE OUTLET TRENCH DETAIL

To apply to Section 3

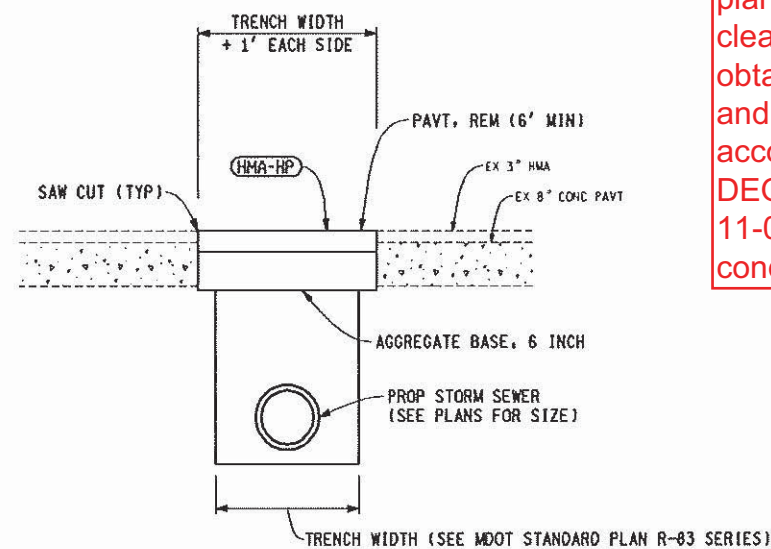


CHURCH OUTLET REMOVAL TRENCH DETAIL

* - EXISTING SEWER PIPE AND EXISTING HMA SURFACE WILL BE DISPOSED OF IN ACCORDANCE WITH SPECIAL PROVISION FOR NON-HAZARDOUS CONTAMINATED MATERIAL HANDLING AND DISPOSAL

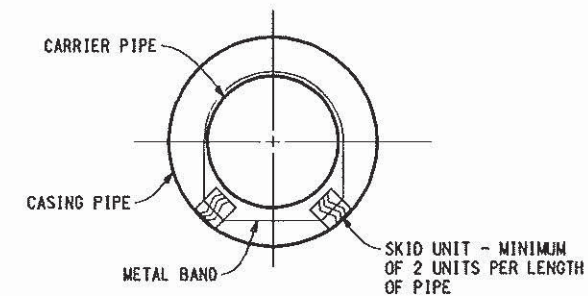


CHURCH OUTLET TRENCH DETAIL



DETAIL OF TEMPORARY PAVEMENT PATCH FOR ADVANCE STORM SEWER PLACEMENT

No change from final plans. Place 6" of clean topsoil obtained from offsite and seed/mulch in accordance with DEQ Permit No. 11-03-0046-P, condition 25.



SKID UNIT DETAIL FOR CASING PIPE

NOTE: THE ANNULAR SPACE WITHIN THE CASING SHALL BE FILLED APPROXIMATELY TWO THIRDS FULL OF SAND. THE TOP OF THE PIPE SHALL NOT BE IN CONTACT WITH THE CASING

NO SCALE

benesch

alfred benesch & company
Engineers • Surveyors • Planners
222 North Washington Square, Suite 200
Lansing, Michigan 48933
PH 313-487-1682 Fax 313-482-7180



DATE
01/06/12

CONT. SEC.
03023/03024

JOB NO.
90028A

DESIGN UNIT
SYTSM

SHEET NO.
R.O.W. CONST.
38

MISCELLANEOUS DETAIL

Figure 4

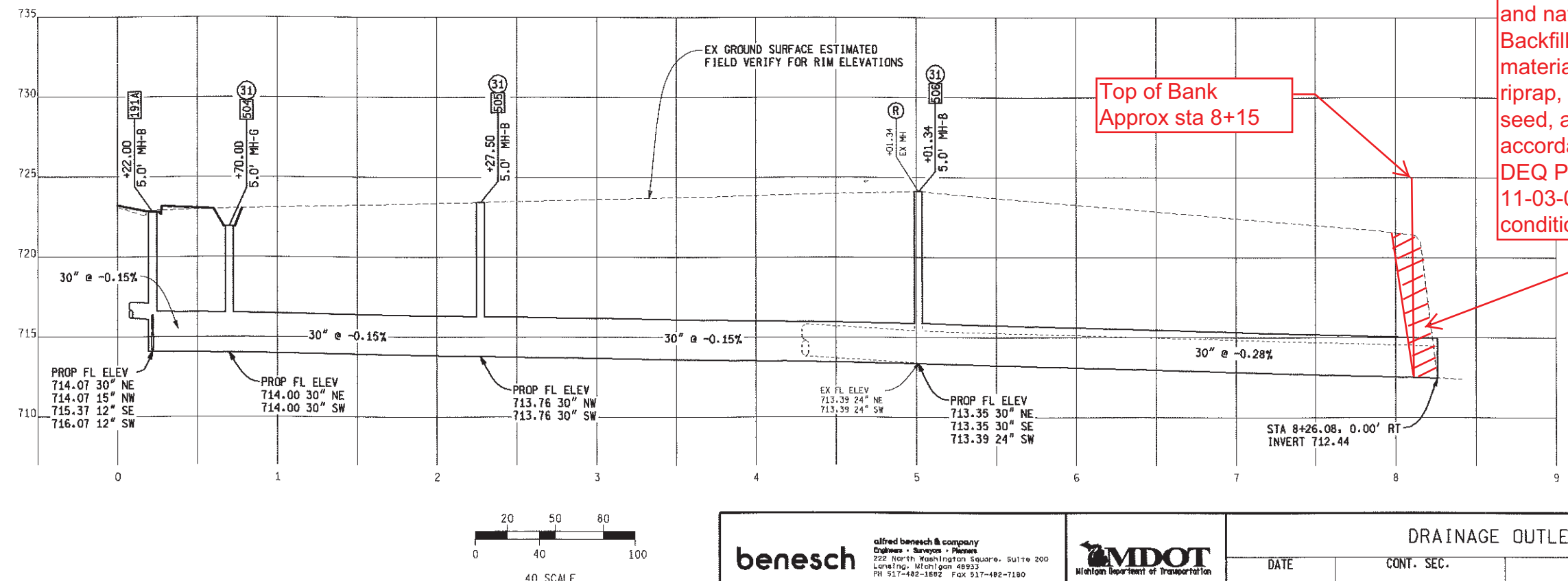
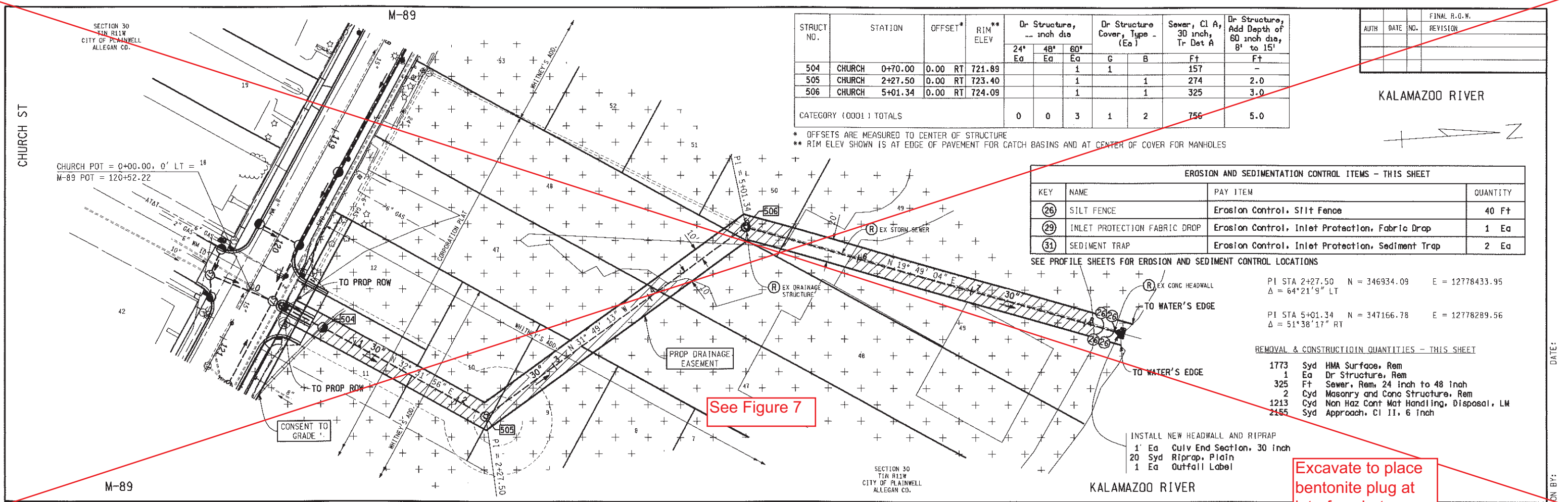
DATE:

WORKED ON BY:

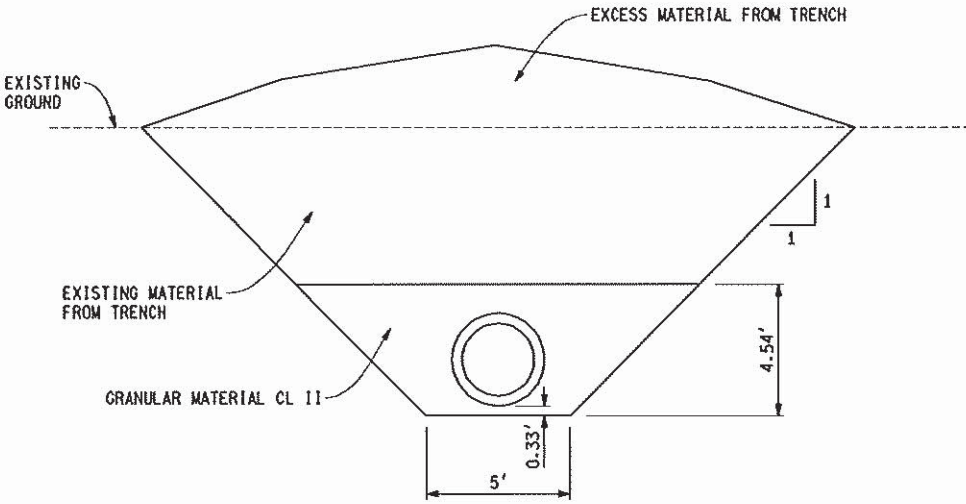
DATE:

CHECKED BY:

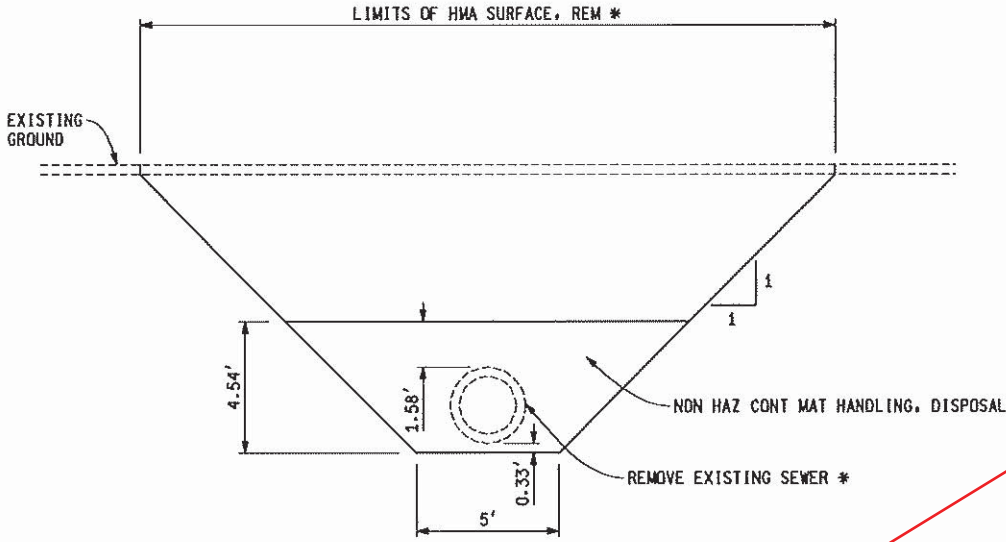
FILE NAME: 90028_miscdet_05.dgn



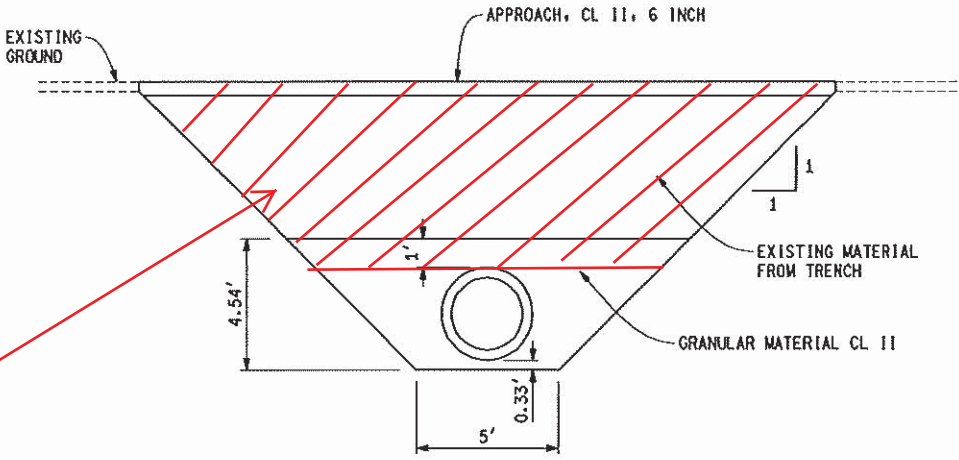
FINAL R.O.W.			
AUTH	DATE	NO.	REVISION



PRINCE OUTLET TRENCH DETAIL



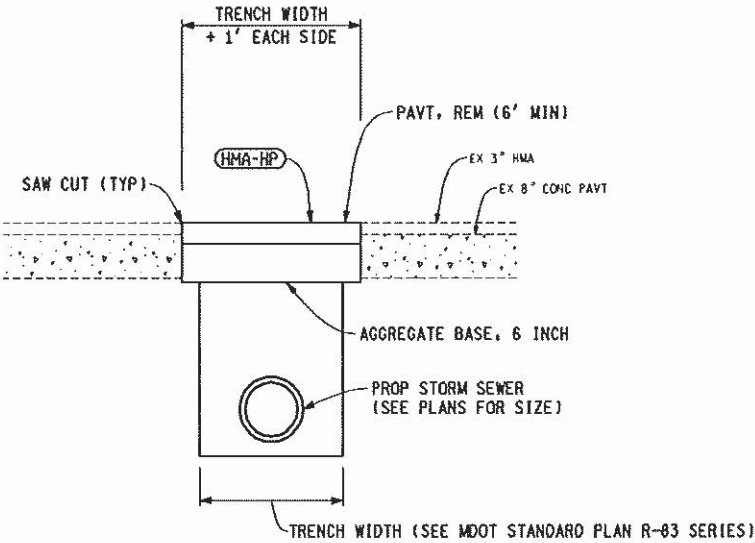
CHURCH OUTLET REMOVAL TRENCH DETAIL



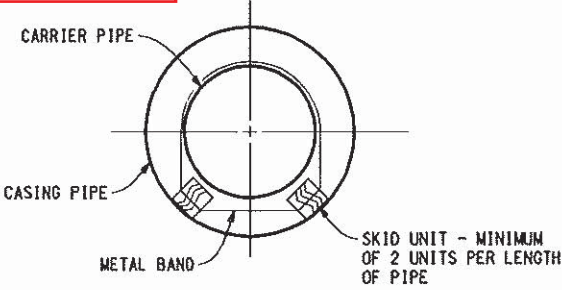
CHURCH OUTLET TRENCH DETAIL

Remove all material in previously excavated trench to top of pipe. Backfill with clean material to 6" below existing ground. Replace riprap per plan. Place either 6" of clean topsoil obtained from offsite and seed/mulch or place "Approach, CI II, 6 Inch" in accordance with DEQ Permit No. 11-03-0046-P, condition 25.

To apply to area previously cleaned by EPA



DETAIL OF TEMPORARY PAVEMENT PATCH FOR ADVANCE STORM SEWER PLACEMENT



SKID UNIT DETAIL FOR CASING PIPE

NOTE: THE ANNULAR SPACE WITHIN THE CASING SHALL BE FILLED APPROXIMATELY TWO THIRDS FULL OF SAND. THE TOP OF THE PIPE SHALL NOT BE IN CONTACT WITH THE CASING

NO SCALE

alfred benesch & company
Engineers • Surveyors • Planners
222 North Washington Square, Suite 200
Lansing, Michigan 48933
PH 313-487-1682 Fax 313-482-7180

Michigan Department of Transportation

MISCELLANEOUS DETAIL					Figure 6
DATE	CONT. SEC.	JOB NO.	DESIGN UNIT	SHEET NO.	
01/06/12	03023/03024	90028A	SYTSMA	R.O.W CONST.	38

DATE:

WORKED ON BY:

DATE:

CHECKED BY:

FILE NAME: 90028_mi.scdot_05.dgn

